

NOTES ON THE NAMES OF SOME BRITISH MARINE MOLLUSCA.

By TOM IREDALE.

Read 11th June, 1915.

My present theme will read somewhat strangely to those conversant with my writings, and an apology seems necessary. In my Antipodean researches I have had continually to refer to British literature and forms. The latest List of British Marine Mollusca appeared in the Journ. Conch., vol. x, p. 9 et seq., January, 1901, and I found it to be unreliable as a guide to present-day conclusions. This List was prepared by a Committee of the Conchological Society of Great Britain and Ireland, and I therefore suggested to the Society, through my friend Mr. J. R. le B. Tomlin, that it was necessary to prepare a new List, and also that I would offer my services as regard nomenclatural details. As far as I can judge the Society was unwilling, but it was intimated that a new List might be unofficially published were full reasons for alterations given, and further that I might undertake it myself. I thereupon criticized the List, and noting that the majority of generic names would at some time or other come under examination in connexion with Antipodean material, I undertook the rectification of the List. Before I had performed much work, I discovered that the explanation for the reasons of the innumerable necessary changes would occupy much more space than the List itself. As many of the names are of much more than local interest, I take this opportunity of recording a number of alterations, with the reasons, and at the same time would remark that a similar criticism of the shells themselves would probably necessitate as many changes.

It would appear that in the quotation and proposal of varietal names no scientific value was considered; the most striking example is in *Paludestrina*, where, under the species *stagnalis*, Basterot, I note var. *octona*, Linné; as I consider this genus non-marine, I make no further remark. In the genus *Littorina* I note under the species *rudis*, Maton, the var. *saxatilis*, Johnston; but the name *saxatilis* is the oldest for this kind of shell, being given by Olivi. I observe that this nomination is of quite ordinary occurrence; nevertheless, it is incorrect, misleading, perplexing, and invalid. To accurately fix any of the names, a complete synonymy, with dates properly determined, is necessary, and this I am now engaged in compiling. As it will probably take years to gather together all the strands, I consider it necessary, as an aid, to publish imperfect conclusions, and solicit criticism from all interested.

Genus NOVALUNA, nom. nov.

For a genus of Aplacophora, *Neomenia*, Tullberg, is in use. This name was proposed in the Bihang. K. Svensk. Vet.-Ak. Handl. Stockh., vol. iii, No. 13, p. 3, October, 1875, for the new species *N. carinata* alone. Tullberg gave the derivation as from the Greek for 'new moon', but in 1828 Billberg, in the Synopsis Faunæ

Scand., vol. i, pt. ii, table A, had proposed *Neomenius*, with the same derivation. I therefore propose to replace Tullberg's name as above. The synonym *Solenopus*, Koren & Danielssen, Archiv Math. and Naturh. Kristiania, vol. ii, p. 127, 1877, is itself preoccupied by *Solenopus*, Schoenherr (Isis, 1825, col. 584).

TECTURA, Gray.

Acmæa, Eschscholtz, has been preferred to *Tectura*, and I note that this was long a source of discussion which was at last decided in favour of *Acmæa* on the score of priority. That there was a prior *Acmæa* seems to have been ignored by all the disputants, but such is a fact, which was on record all the time. *Acmæa* is a valid molluscan name, and I think it quite impossible to maintain as well, in practical usage, *Acmæa*. I think, moreover, that the type of *Acmæa* cannot be regarded as congeneric with the British shells so named. For them we can then revert to *Tectura*, first introduced in a Latin guise by Gray, Proc. Zool. Soc., 1847, p. 158, the type by original designation being *Patella parva*, which is regarded as a synonym of *P. virginea*, O. F. Müller (Zool. Dan. Prodr., p. 237, 1776, Danmark). 'Tecture' had only previously appeared as a French vernacular, as admitted by all writers.

When Dall reviewed the *Acmæidæ* he proposed *Collisella* (Amer. Journ. Conch., vol. vi, p. 245, April 4, 1871) as a sub-genus of *Acmæa*, designating as type *A. pelta*, Eschscholtz. To that sub-genus he referred *Patella testudinalis*, O. F. Müller (Zool. Dan. Prodr., 1776, p. 237, Danmark). As a synonym of this name has been generally quoted *Patella tessellata*, O. F. Müller. That name first appeared on the same page as *testudinalis*, but placed before it, and has therefore place priority; it is there spelt *tessulata*. In the Zool. Dan. later, O. F. Müller gave long detailed descriptions of the new species diagnosed in two lines in the Prodomus above cited. In vol. i, p. 27, 1779, a full detailed account of *Patella tessellata* is given, but there is no further mention of *P. testudinalis*. This is, to me, suggestive, as there was a prior *P. testudinaria*, Linné, Syst. Nat., 10th ed., 1758, p. 783, and I would conclude that Müller's *tessulata* or *tessellata* has the best claim to usage.

ANSATES, Sowerby, 1839.

In the List *Patina*, Leach, is used. I hope such a quotation will surely never be given again by a worker who has to trace names, and my usage is the rejection of all Leachian names until it be proved that Leach published them. The earliest usage of *Patina* I have yet traced is that by Gray, when he published the Leachian names in the Ann. Mag. Nat. Hist., vol. xx, p. 271, October, 1847. His type was by monotypy *P. lævis*. However, in the Conchological Manual, 1st ed., 1839, by Sowerby, I came across the following entry: "p. 6, *Ansates*, Klein. Species of *Patella* with a produced recurved beak. *Helcion*, Montf. Ex. *Patella pellucida*, fig. 230." From this, the only conclusion possible is the recognition of *Ansates*, Sowerby

(ex Klein) in place of Gray's name *Patina*, over which it has eight years priority.

DIODORA, Gray.

In the List *Fissurella græca* appears. The species *græca* cannot be referred to the genus *Fissurella*, so that error is here at once apparent. *Fissurella* was introduced by Bruguière in the Encycl. Méthod. Vers., vol. i, p. xiv, 1791, with a vague diagnosis, and no species cited. At this introduction it can only be considered a *nomen nudum*. In 1799 Lamarek in the Mém. Soc. Hist. Nat., p. 78, cited in conjunction the species *Patella nimbosa*, Linné. The name then dates for actual usage from this place, and *nimbosa* is not congeneric with *græca*. In the Man. Conch., vol. xii, p. 205, 1890, Pilsbry recognized this, and allotted the species '*græca*' to *Glyphis*, Carpenter. This name was proposed in the Cat. Mazatlan Shells, p. 220, 1856, apparently for the *græca* group, but the name chosen was preoccupied by *Glyphis*, Agassiz (Poiss. foss., vol. iii, p. 241, 1843). Hedley, following Pilsbry and Johnson (Nautilus, vol. v, p. 104, January, 1882), in his Cat. Marine Moll. Queensl. (Proc. Austr. Assoc. Adv. Science, Brisbane, 1908, p. 352, 1909) therefore rejected *Glyphis*, and used for a large group *Fissuridea*. This name was proposed by Swainson (Treatise Malac., p. 356, 1840) with the diagnosis "Sub-conical, cap-shaped; the summit close to the posterior margin: the perforation narrow. *T. pileus*, Sw. Sp. nov." The species was recognized as '*galeata*, Helbling' by Pilsbry, and Swainson's name was used for this alone. With doubt I have followed Hedley in associating shells of '*græca*' affinity with those like '*galeata*, Helbling'. Recently my doubts have been confirmed, and I will later show that these two are certainly generically distinct. Consequently *Fissuridea* is not available for the former. Dall in the Proc. U.S. Nat. Mus., vol. xlvi, pp. 437-40, January 19, 1915, has discussed the names given to species of this family in the *Conchological Illustrations*. He has there put forward *Lucapina*, as of Sowerby, 1835, as applicable to the group. On his data I would prefer *Foraminella*, but we are saved from a further complication by the recognition of a name long anterior to *Lucapina* or *Fissuridea*. Gray in the London Medical Repository, vol. xv, p. 233, March 1, 1821, proposed *Diodora* for *Patella apertura*, Mont. It is acknowledged, without argument, that *Patella apertura* was based upon the immature stage of the British shell known as *Fissurella græca*. This name, then, is available, and must be used for the *græca* affinity. The laws governing zoological nomenclature are definite on this point, and the subject requires no discussion. It is obvious that this detail was simply overlooked by Pilsbry and Dall, as neither of these workers would consider any argument with regard to such a simple matter.

The correct specific name of the British shell may as well be here discussed. Though '*græca*' was used in the List, this was against the conclusions of most conchological writers. The majority have affirmed the distinction between the British shell and the Mediterranean one named '*græca*'. Owing to confusion the majority of workers on

Mediterranean shells reject '*græca*' altogether. The British shell was first named "*P(atella) larva, reticulata*" by Costa in the Brit. Conch., 1778, p. 14, pl. i, fig. 3. This is one of the very few trinomials present in Costa's work, and has been dismissed as indeterminate. If he meant to use '*P. reticulata*', as would appear from his Index, then his name is antedated by Linné's usage in the Syst. Nat., 10th ed., 1758, p. 784. The same remark applies to *Patella reticulata*, used by Donovan, Nat. Hist. Brit. Shells, vol. i, pl. xxi, fig. 3, circa 1800, which has been often utilized.

We then arrive at *Patella apertura*, Montagu (Test. Brit., vol. ii, p. 491, pl. xiii, fig. 10, 1803: Falmouth), which, founded on an immature shell, must come into use.¹ The Laws are very clear regarding this, and nobody requests any revision.

RISSELLA, Gray.

In the Proc. Zool. Soc., p. 159, November, 1847, Gray wrote, "*Rissoella*. Rissoa, sp. Brown. *Rissoa?* *glaber*, Alder." Forbes and Hanley (Hist. Brit. Moll., vol. iii, p. 151, June, 1850) introduced a genus *Jeffreysia* as of Alder MS. for the above species and another one. The description is based upon the first-named, which must be therefore regarded as the type, and *Jeffreysia*, being coequal with and later than *Rissoella*, must pass into synonymy. The usage of the former has been continued, as it was urged that no description of *Rissoella* was offered previous to Forbes & Hanley's correct proposal of *Jeffreysia*. This argument, of course, does not hold good at all, but its basis is shattered by the fact that Gray in the Fig. Moll. Anim., vol. ii, p. 86, had provided a correct diagnosis, and this had appeared in February-March, 1850, that is, three months prior to Forbes & Hanley's introduction.

ACMEA, Hartmann.

In the Neue Alpina, Bd. i, pp. 204-12, 1821, Hartmann proposed a genus *Acmea*, with full diagnosis, species described, and figures given. Such a proposal cannot be ignored, yet such seems to have been the fate of this name. I select as type of the genus the species *Acmea truncata*, and thereby fix the name for active use. This will mean that *Acmea* will replace *Truncatella*, Risso, 1826. The murmur against the dismissal of *Truncatella* may be lessened when it is explained that three pages prior to his proposal of his name Risso had introduced the genus *Fidelis*, and under all the laws this name would also succeed against *Truncatella*. I would accept *subcylindrica*, Linné (*Helix* s., Syst. Nat., 12th ed., 1766, p. 1248) for the species name, as used by French malacologists, and, as explained by Hanley, this name is confirmed by the shell in the Linnæan cabinet: *truncata*, Montagu, is also twice invalid, being preceded by *subtruncata* (Test. Brit., vol. i, p. 300, 1803).

¹ I see Dall (loc. cit.) writes "*apertura*, Montagu (not Born)" but this appears to be a slip, following Gray, 1847, who quotes *Patella apertura*, Born. I cannot find such a name in Born's works, nor does Sherborn record it in the *Index Animalium*.

TRIVIA JONENSIS (Pennant).

In the List *Trivia europæa* (Montagu) is used. Recent writers have admitted *Trivia arctica* (Pulteney) to be more correct, on the score of priority. I would only cite one, Shaw (Proc. Malac. Soc., vol. iii, p. 309, July, 1909), who has discussed the matter during a review of the species of *Trivia* and *Cypræa*. Pulteney's name appeared in a Cat. Birds, Shells, etc., Dorset, published in 1799, on p. 39, ex Solander MS. This work has on the title-page, "Printed for the use of the Compiler and his friends," and otherwise purports to be a part of Hutchins' History of Dorsetshire, and is so quoted by Forbes & Hanley. It is well-known that with the second edition of Hutchins' Hist. Dorset, an amended edition of Pulteney's work, prepared by Rackett, was published. I now state that, according to my results, Pulteney's Catalogue was *not* published as a part of Hutchins' History of Dorset, but only appeared in the guise, above noted, as a separate List. Prior to Pulteney's proposal of *C. arctica*, Costa (Brit. Conch., 1778, p. 33, pl. ii, fig. 66) had figured and described the British shell, and, doubting its reference to the Linnean *Cypræa pediculus*, had designated it (*Cypræa*) *pediculus* seu *monacha*. As it turned out to be different from *pediculus* the alternative name proposed by Costa must be recognized.

However, previously to Costa, Pennant (Brit. Zool., 2nd 8vo ed., vol. iv, p. 117, pl. lxxi, fig. 8, 1777) had described *Voluta jonensis*, from I. of Jona. Laskey (Mem. Wern. Soc., vol. i, p. 395, 1811) has observed under the name *Cypræa europæa*, M., "Rather plentiful at Dunbar, and to be met with sparingly on most parts of the coast. With all the varieties we are happy to find Mr. Montagu is of the same opinion in respect to this shell and the fry as ourselves. By this means *Cypræa arctica*, *Cypræa bullata*, *Bulla diaphana*, and, in fact, *Voluta Jonensis* of Pennant should be all erased from the British catalogue as species, and *arctica* should alone stand, as the variety without spots of *Europæa*. N.B.—A specimen of *Voluta Jonensis* is now in my cabinet from the Portland Collection: and it is well known Pennant figured his shell from this collection." Such an account, being in accordance with the known facts, demands the recognition of Pennant's name.

COMARMONDIA, Monterosato.

The value of the divisions in the family Turridæ are not yet fixed. In the List, *Bellardiella*, Fischer, is given generic rank, while Dall (Bull. Mus. Comp. Zool. Harv., vol. xliii, p. 242, 1908) regarded it as a sub-genus only. Whichever it is, the name is invalid, for previous to Fischer's publication (Man. de Conch., pp. 593-4, December 20, 1883) Tapparone-Canefri (Ann. Mus. Genova, vol. xix, p. 265, ante July 11, 1883) had appropriated the name.

Comarmondia was proposed simultaneously by Monterosato (Nomen gen. e spec. Conch. Medit., 1884, p. 135) for the same shell, the author being necessarily ignorant of Fischer's action.

ERATO VOLUTA (Montagu).

This shell is more commonly known as *Erato laevis*, Donovan (Nat. Hist. Brit. Shells, vol. v, pl. clxv (*Voluta*), 1804: Weymouth). As far as I can yet ascertain, this volume did not appear until after the publication of Montagu's Test. Brit. It may be that Donovan's name has really priority of publication, but until this can be actually proved we must admit Montagu's name. Many names depend upon the facts, and at the present time all Donovan's names published in the fifth volume are ranked as later than Montagu's. In the present instance Montagu's name has been rejected, as it has been cited as *Bulla voluta*, and there is a prior *Bulla voluta*, Gmelin (Syst. Nat., p. 3433, 1791). It is thus quoted in Forbes & Hanley's Hist. Brit. Moll., vol. iii, p. 502.

Montagu, however, called it *Cypræa voluta* (Test. Brit., pt. i, p. 203, pl. vi, fig. 7.7, 1803: Salcomb Bay), and this name is valid and must be preserved.

Family CERITHIIDÆ.

Under this name appear the genera *Cerithium*, *Bittium*, *Triforis*, *Newtoniella*, *Cerithiopsis*, and *Læocochlis*. I am unable to defend this association, and I think that not only is the family heterogeneous, but the genera are also polyphyletic. The shell classed under *Cerithium* is quite unlike the type of the genus, whether we accept Lamarck's selection or not. For the species described by Jeffreys as *Cerithium procerum* (Ann. Mag. Nat. Hist., ser. iv, vol. xix, p. 322, April 1, 1877: Valorous, Station 12) I propose the new genus name

CHASTERIA, n.g.

CHASTERIA DANIELSENI (Friele).

This will be the name for *Cerithium procerum*, Jeffreys, as thirty odd years before Kiener, Coq. Viv. *Cerithium*, p. 22, pl. xviii, figs. 1-1a, 1841-2, had selected that name for a different shell. In the Nyt. Mag. Naturvid. (Christ.), vol. xxiii, pl. iii, p. 3, 1876-7, Friele had described the same shell as *Cerithium danielсени*. I have not yet ascertained the exact dates, but I believe that Friele's name has also priority, an advantage which is not now necessary.

EUMETA ARCTICA (Mörch).

This would appear to be the correct name for the shell listed as *Cerithiopsis costulata*, Möller. In the Index Moll. Grœnl., 1842, p. 10, Möller proposed *Turritella* (?) *costulata* from Greenland. In the Vidensk. Med. Nat. Forh. (Kjöben.), 1868, p. 208, Mörch introduced *Eumeta* as a sub-genus of *Cerithium* for this species, having previously changed the specific name as above. This alteration has recently been rejected, as it was argued the species was not a true *Cerithium*. I would point out, however, that Mighels & Adams proposed in January, 1842, a *Turritella costulata* (Bost. Journ. Nat. Hist., vol. iv, pl. i, p. 50), and this name invalidates Möller's selection. In Brit. Conch., vol. iv, p. 273, 1867, Jeffreys wrote: "Mörch changed the name given by the discoverer to *Cerithium arcticum*, because the latter had

described the shell as *Turritella? costulata*, it not being Lamarck's nor Risso's so-called species. But the present species is not a *Turritella* (as, indeed, Möller suspected): and the reason assigned by Mörch is, therefore, insufficient. I described the fossil shell as *Cerithiopsis nivea*, and S. P. Woodward proposed to name the recent one *Cerithium Naiadis*." This passage might be cited as a perfect example of how *not* to make conchological literature. There is not a single reference given, and the attempted recovery of such has entailed so much labour that I here record my results as an aid to future investigators. Mörch changed the name in Rink's Grønland, Band ii, Nat. Bidr., p. 82, 1857, because he transferred the species to *Cerithium*, according to some writers. I have been unable to find *Turritella costulata* in Lamarck's writings, nor does Risso give such a species as far as I can discover.* No reason was assigned by Mörch, his words being "*Cerithium arcticum*, nob. *Turritella? costulata*, Møll. nec. Lam. nec. Risso". Such an entry suggests what Jeffreys wrote, but it was his duty to verify the facts before endorsing the statement. In the Ann. Mag. Nat. Hist., ser. III, vol. iii, p. 53, pl. iii, figs. 17a, b, January, 1859, Jeffreys described *C(erithiopsis) nivea* from the Turbot Bank, Belfast Bay, with no intimation that it might be fossil. In the same place he recorded *C(erithiopsis) naiadis* from Zetland as "Mr. Woodward has undertaken to describe it, with other Norwegian shells, in the 'Annals'". I have searched this and every other source I can think of, and have been compelled to conclude that the last-named has never been described and is still a *nomen nudum*. In the British Museum there is a shell, presented by R. McAndrew, labelled in his handwriting "*C. naiadis*, Woodward MSS. Finmark, R. Mc."

GRAPHIS, Jeffreys.

Cioniscus, Jeffreys, must be abandoned in favour of this name. *Graphis* was proposed (Brit. Conch., vol. iv, p. 102, 1867) for *unica*, Mont. = *albidus*, 'G. Adams.' In the next volume, p. 210, 1869, Jeffreys replaced *Graphis* by *Cioniscus*, as he had noted that *Graphis* was preoccupied in Botany. Botanical names do not now concern us, and I do not find that *Graphis* was anteriorly used in Zoology, so that we must revert to Jeffreys' first nomination.

RISSOID NAMES.

I am now engaged upon these, and I find that there is great confusion. So far I note the following cannot be maintained: *Rissoa albella*, Lovén, *Alvania reticulata* (Montagu), *Manzonina costata* (J. Adams), *Onoba striata* (J. Adams), *Barleeia rubra* (Montagu), and probably *Galeodina carinata* (Costa).

Family PYRAMIDELLIDÆ.

In the List twelve generic groups are admitted. Dall & Bartsch issued as U.S. Nat. Mus. Bulletin, No. 68, December 13, 1909, a Monograph of West American Pyramidellid Mollusks, and therein gave a Synopsis of the Genera, Sub-genera, and Sections. Following

* *Turritella costulata* Mich. Gal. Douai, 1838 is same as *Turritella c.*, Risso, 1826.

a policy I cannot endorse, they recognized three generic groups in place of the twelve mentioned above, but regarded as sub-genera practically all the above and some additional ones. It is quite impossible to criticize thoroughly the treatment, but I cannot, from my studies in Antipodean molluscs, agree with the groups provided in the above-named Monograph. It would be useful simply to correlate the Monograph ideas and the List associations, but it must be remembered this is only a superficial résumé. I hope to thoroughly study the group at a later date.

LIST NAMES.

D. & B. MONOGRAPH.

<i>Odostomia.</i>	<i>Odostomia</i> , s.s.
sp. (<i>conoidea</i>).	Subg. <i>Ondina</i> .
<i>Jordanula.</i>	Subg. <i>Jordaniella</i> .
<i>Liostomia.</i>	Subg. <i>Liostomia</i> .
<i>Brachystomia.</i>	Sect. of <i>Odostomia</i> , s.s.
Subg. <i>Doliella</i> .	Subg. <i>Doliella</i> .
<i>Ondina.</i>	Subg. <i>Evalea</i> .
<i>Oda.</i>	Subg. <i>Oda</i> .
<i>Pyrgulina.</i>	Subg. <i>Pyrgulina</i> .
sp. (<i>interstincta</i>).	Subg. <i>Parthenina</i> .
sp. (<i>fenestrata</i>).	<i>Turbonilla</i> , subg. <i>Tragula</i> .
<i>Spiralinella.</i>	<i>Odostomia</i> , subg. <i>Spiralinella</i> .
<i>Miralda.</i>	" " <i>Miralda</i> .
<i>Pyrgostelis.</i>	<i>Turbonilla</i> , subg. <i>Pyrgiscus</i> .
sp. (<i>scalaris</i>).	" " <i>Pyrgisculus</i> .
<i>Turbonilla.</i>	<i>Turbonilla</i> , s.s.
<i>Eulimella.</i>	<i>Pyramidella</i> , subg. <i>Eulimella</i> .

Though the associations seen in the List may, and do, need readjustment, the method utilized of expressing the facts is preferable to that of the Monograph. I will only deal here with nomenclatural matters, and will later discuss the relationships.

CREMULA, n.g.

I propose this name for *Turbonilla clavula*, Lovén (Ofvers. K. Vet. Akad. Forh., Stockholm, 1846 (January 14), p. 49, pl. i, fig. 7: Norway). In the Moll. Reg. Arct. Norveg., November, 1878, p. 205, G. O. Sars introduced *Liostomia* for two species—*eburnea*, Stimpson, and *clavula*, Lovén. In the Nomen. gen. e spec. Conch. Medit., 1884, p. 95, Monterosato selected the type as *T. clavula*, Lovén. In the Monograph, apparently not recognizing this, the type is cited as *eburnea*, Stimpson. As far as I know, Dall & Bartsch first made this selection in the Proc. Biol. Soc. Wash., vol. xvii, p. 13, February 5, 1904, but that was twenty years too late. In the Treat. Malac., 1840, p. 328, Swainson had employed Sars' selection under the spelling *Leiostoma*, so that I now make rectification as above.

ZASTOMA, nom. nov.

I propose the above for *Brachystomia*, Monterosato, Nomen. gen. e spec. Conch. Medit., 1884, p. 94, introduced with *rissoides*, Hanley, as the typical species. In the List this is given generic rank, with six species, and *Doliella*, Monterosato, Bull. Soc. Malac. Ital., vol. vi,

p. 73, 1880, proposed for *O. nitens*, Jeffreys, is added as a sub-genus for its type species alone. *Doliella* has thus priority, but Dall and Bartsch separate these, making *Doliella* a sub-genus, and admitting *Brachystomia* as a section only of *Odostomia*, s.str. Whatever the ultimate status, the name must be changed on account of the prior *Brachystoma* of many authors and even in Molluscs of Gardner, Geol. Mag., ser. III, vol. III, p. 160, 1876.

In the List appear *Brachystomia rissoides* (Hanley) and *B. ambigua* (Maton & Rackett) = *pallida*. In the first case, as a varietal name, is cited *nitida*, Alder.

Odostomia rissoides was proposed by Hanley in the Proc. Zool. Soc., 1844, p. 18, which appeared in July, while *O. nitida* was introduced by Alder in the Ann. Mag. Nat. Hist., vol. XIII, p. 326, pl. VIII, fig. 5, on May 1, 1844, and the latter has therefore absolutely priority.

Maton & Rackett proposed *Voluta ambigua* (Trans. Linn. Soc., vol. VIII, p. 132, 1807) as a new name for *Turbo pallidus*, Montagu, Test. Brit., pt. II, p. 325, 1803, and when it is acknowledged that the latter is indeterminable, the former must also be so classed. In La Feuille des jeunes Nat., ser. V, No. 493, January 1, 1912, Martel discussed *T. pallidus*, Montagu, and concluded that, in view of the diverse attempts at identification and the facts cited, it must be regarded absolutely as indeterminable. As a substitute he advocated *eulimoides*, Hanley, which was proposed at the same time and place as *rissoides*. He discussed this latter, and relegated it to varietal rank only under *eulimoides*. He did not concern himself with *nitida*, Alder, so that his nomination must be reconsidered, even if his facts be accurate. However, Forbes & Hanley (Hist. Brit. Moll., vol. III, p. 284, 1853) cite *Odostomia scalaris*, Macgillivray (Hist. Moll., Aberdeen, p. 154, 1843) as a synonym of *O. rissoides*, Hanley. This name is even earlier than *nitida*, Alder, and its claim must be investigated. Jeffreys ignored it, as he lumped the majority of the Pyramidelloid shells under *Odostomia*, and consequently Philippi's *Melania scalaris* (Enum. Moll. Sicil., vol. I, p. 157, pl. IX, fig. 9, 1836) was earlier. The latter species, however, is the type of *Pyrgisculus*, which, if not admitted as a valid genus, is ranked under *Turbonilla*. Apparently *scalaris* would replace *rissoides*, and *eulimoides* come into use for *ambigua*.

BURKILLIA, n.g.

I introduce this name for *Odostomia fenestrata*, Jeffreys (Ann. Mag. Nat. Hist., ser. II, vol. II, p. 345, November, 1848 (ex Forbes MS.): Dartmouth). This species is included in the List under *Pyrgulina*, which is obviously an unhappy location. Dall & Bartsch place it under *Turbonilla*, giving it subgeneric rank under the name *Tragula*, which Monterosato (Nomen. gen. e spec. Conch. Medit., 1884, p. 86) provided for it alone. That name cannot, however, be maintained, as there is a prior *Tragulus*, Brisson, Reg. Anim., 1762, p. 65.

EVALEA, A. Adams.

Dall & Bartsch replace *Oudina*, Folin, by the above name, which was proposed as a sub-genus of *Odostomia* (Ann. Mag. Nat. Hist.,

ser. III, vol. vi, p. 22, July, 1860) for apparently the same group. I believe Dall & Bartsch in this case are right, but as another synonym (p. 192) they cite "*Ptychostomon*, Locard, Prod. les Moll. France, 1886, p. 228. Type *Turbo conoideus*, Brocchi". In this they are wrong as, though Locard proposed *Ptychostomon* without designating a type, he used it generally for the smooth *Odostomia*, which name is missing. Upon reference to p. 571, Locard explained that *Ptychostomon* was proposed as a new name for *Odostomia*, Fleming, 1819, on grounds of purism. The type of *Ptychostomon* is, then, *Turbo plicatus*, Montagu.

Kobelt has used Locard's emendation, disregarding all laws of nomenclature, the family name becoming Ptychostomidæ. Many years previously, however, a general substitute for *Odostomia* had been proposed by Clark (Jeffreys, Brit. Conch., vol. iv, p. 109, 1867), viz. *Monoptaxis*, and this would have been available, though possibly purists might make complaint against this even. It is also as well to record that Locard, in his choice of a name, had been long anticipated by *Ptychostomum*, Stein, Sitzung. Böhm. Ges. Wiss., vol. lxi, 1860.

PYRGISCULUS, Monterosato.

This name would replace *Pyrgostelis*, Monterosato (Nomen. gen. e spec. Conch. Medit., 1884, p. 89), which had as type *Mel. rufa*, Philippi, regarded in the List as a var. of *interrupta*, Totten, as it was proposed in the same place, on the previous page, for *scalaris*, Philippi, which is here classed with it. Dall & Bartsch, however, do not consider these two should be placed in the same sub-genus, but admit two different sub-genera for them, *Pyrgiscus* and *Pyrgisculus*, placing them under *Turbonilla*.

Pyrgiscus was introduced by Philippi in the Archiv für Nat. (Wiegmann) 1841, p. 50, apparently as a substitute for *Turbonilla*, Risso, but Dall & Bartsch have used as type of this the species *rufa*, and consequently, if their action be correct, *Pyrgostelis*, Monterosato, is an absolute synonym of *Pyrgiscus*.

NOEMIAMEA.

Oda was proposed by Chaster (Journ. Conch., vol. x, p. 8, January, 1901), on Monterosato's suggestion, to replace *Noemia*, De Folin, "as this name is preoccupied in the coleoptera," citing *Odostomia dolioliformis*, Jeffreys, in this connexion. It is accepted as a sub-genus of *Odostomia* by Dall & Bartsch, while *Noemia* and *Noemiamea* are included in the synonymy of *Chrysallida*, Carpenter, the type being given of *Noemia* as *Noemia angusta*, De Folin.

I have already indicated errors in connexion with Dall & Bartsch's quotations ex *Les Fonds de la Mer*. Mr. Alex Reynell has lent me a number of parts of the first volume of *Les Fonds de la Mer*, and from them I find that this journal came out in livraisons in the order they appear according to pagination. Consequently the name *Noemia* depends upon its first introduction, which was in connexion with the species *Noemia valida* (Folin, *Fonds de la Mer*, vol. ii, p. 63, pl. ii,

fig. 6, 1872: Gigon). The type of *Noemia* then, by monotypy, is this species, which has been recognized as *dolioliformis*, Jeffreys. This was fixed by Monterosato (Nat. Sicil., vol. iv, p. 85, January, 1885) as type of *Noemia*, De Folin, 1870. In 1870 De Folin only gave a crude and indeterminate diagnosis of the genus *Noemia*, and the first species associated with it afterwards was *valida*. In 1886 *Noemiamea* was proposed (Zool. Record, 1885, p. 94, 1886) to replace *Noemia*, as that name was seen to be preoccupied. No type was named, and therefore the name must follow Monterosato's designation, as well as monotypy. Monterosato, when he advised Chaster to propose *Oda*, simply overlooked the fact that the alteration had been made.

The type, cited by Dall & Bartsch, at their quotation, is only a nude name, and cannot be utilized. Consequently *Noemiamea* must replace *Oda*, and *Noemia* be cited as a synonym.

EULIMELLA MACANDREWI (Forbes).

Eulimella was first introduced by Jeffreys (Ann. Mag. Nat. Hist., vol. xix, p. 311, May, 1847), ex Forbes MS., for *Eulina macandrewi*, Forbes (Ann. Mag. Nat. Hist., vol. xiv, p. 412, pl. x, fig. 2, December, 1844: Loch Fyne). I would accept the name given to the British shell, as it seems doubtful that it is *Melania scilla*, Scacchi, 1836, which, moreover, according to Monterosato (Nat. Sicil., vol. iv, p. 203, May 1, 1885), is *Turritella pyramidata*, Deshayes, 1832; this name I have not yet been able to trace.

Dall & Bartsch make *Eulimella* a sub-genus of *Pyramidella*, writing, "Columellar folds two." The author (Forbes) wrote, "Columella not plicated, straight or nearly so," and this appears to have been the opinion of every writer, save Dall & Bartsch, that I have consulted.

DONOVANIA BRUNNEA (Donovan).

It has been quite commonly recognized that *Buccinum minimum*, Montagu (Test. Brit., pt. i, p. 247, pl. viii, fig. 2, 1803: South Devon) was preoccupied by *Buccinum minimum*, Turton (Gen. Syst. Nat., vol. iv, p. 387, 1802), but the necessary alteration has never been made as above. *Buccinum brunneum* was described and figured by Donovan, Nat. Hist. Brit. Shells, vol. v, pl. clxxix, fig. 2, 1804, from Cornwall.

COLUS, Bolten.

In the Mus. Bolten, 1798, p. 117, Bolten introduced a genus *Colus*. Dall, in the Journ. Conch., vol. xi, p. 294, April, 1906, designated as type of this genus *Murex islandicus*, Gmelin, and consequently this name must come into use in place of *Tritonofusus*, Beck, as used in the List. As recently as 1911 (Proc. Malac. Soc., vol. ix, p. 339) Sykes used *Sipho* subgenerically for his group. This name cannot be defended by anyone, nor can the reference to Chemnitz, vol. iv, for the specific name.

TROSCHELIA, Mörch.

This name was introduced by Mörch in the Journ. de Conch., vol. xxiv, p. 376, 1876, for *Fusus berniciensis*, King, and should

come into use for that species, vice *Buccinofusus*, Conrad. Dall (U.S. Geol. Survey, Prof. Paper, No. 59, 1909, pp. 36-9) has stated, from a study of Conrad's species, that they are not congeneric with the British shell.

CYLICHNINA STRIGELLA (Lovén).

In the List *Tornatina umbilicata*, Montagu, is included. I have already shown that *Tornatina* cannot be maintained, and I now record that *Bulla umbilicata*, Montagu (Test. Brit., vol. i, p. 222, pl. vii, fig. 4, 1803: Falmouth) is antedated by *Bulla umbilicata*, Bolten (Mus. Bolten, 1798, p. 15). As a variety is classed *Cylichna strigella*, Lovén (Ofvers. K. Vet. Ak. Forh. (Stockh.), May, 1846, vol. iii, p. 142: Boh.), and this will now become the species name.

MUSCULUS NIGER (Gray).

This name will replace *Modiolaria discrepans* (Leach). Leach simply made use of this specific name as of Montagu, and when it is admitted the usage was different Leach's name becomes invalid. Gray in the Voy. N.W. Pass. by Parry, App. p. ccxlv, 1821, provided *Modiola nigra* as a new name for "*discrepans*, Mont., pl. xxvi, fig. 4".

IDASOLA, nom. nov.

This name is provided for *Idas*, Jeffreys, Ann. Mag. Nat. Hist., ser. iv, vol. xviii, p. 428, November 1, 1876, which was anticipated by *Idas*, Mulsant, Ann. Soc. Linn. (Lyon), n.s., vol. xxii, p. 223, 1875.

BROCKTONIA, n.g.

I propose this name for *Cryptaxis crebripunctatus*, Jeffreys, Proc. Zool. Soc., 1883, p. 398, pl. xlv, figs. 11a-c: between Hebrides and Faeroes. This shell does not really fall into *Cryptaxis*, Jeffreys, 1883, which is moreover invalid, and for which Cossmann (Essais Paléococh. comp., i, p. 90, February, 1895) has provided the substitute *Clistaxis*.

RHOMBOIDELLA PRIDEAUX (Leach).

In the List appears *Crenella rhombea* (Berkeley), based on *Modiola rhombea*, Berkeley, Zool. Journ., vol. iii, p. 229, suppl. pl. xviii, fig. 1, September, 1827: Weymouth. It is acknowledged that this is the same shell as *Modiola prideaux*, Leach (Zool. Misc., vol. ii, p. 35, 1815: Milton, Devon), but this name was rejected as unfigured. This is no valid reason, but I might point out that Brown (Illus. Conch. Gt. Brit., pl. xxix, fig. 9) figured Leach's species the same year (1827) as Berkeley described his shell. If *Crenella*, Brown (Illus. Conch. Gt. Brit., 1827, pl. xxxi), provided for *C. elliptica*, figs. 12-14 (= *Mytilus decussatus*, Montagu, Test. Brit. Suppl., p. 69, 1808: Scottish coast), be regarded as a distinct genus from *Musculus*, then the present species should also be recognized under the name *Rhomboidella*, provided by Monterosato (Nomen. gen. e spec. Conch. Medit., 1884, p. 13) for this shell alone. In its sculpture it would fall into *Crenella*, but from its shape it would be regarded as a *Musculus*.

AZOR CHAMA-SOLEN (Costa).

This would appear to be the correct name for the shell known as *Solecortus antiquatus* (Pulteney). Pulteney used it as of Solander, and I find that in the Mus. Portl. Solander's name was published (p. 101, 1786), but prior to this date Costa had named the same shell (Brit. Conch., 1778, p. 238: Weymouth), (*Solen*) *chama-solen*. This specific name must be preserved, and it is not inappropriate when it is remembered that *Chama*, Costa, was not *Chama*, Linné. Costa used it for the Gapers, and if his claim that the ancients so used it be correct, it does seem inaccurately to have been bestowed by Linné on a genus of shells noted for their tightly closed habit.

The earliest introduction of *Azor* seems to be by Brown (Illus. Conch. Gt. Brit., 2nd ed., 1844, p. 113) for this species alone. This relieves the difficulty noted by me in this journal (vol. x, 1913, p. 303). Anatomical examination has proved this species to differ sufficiently for generic recognition from *Solecortus*.

PANOMYA ARCTICA (Lamarek).

This name will replace *Panopea norvegica*, Spengler, of the List. *Panomya* was proposed by Gray (Fig. Moll. Anim., vol. v, p. 29, 1857) for the species *Mya norvegica*, Spengler (Skriv. naturh. Selsk. Copen., vol. iii, pt. i, p. 46, pl. ii, fig. 18, 1793: Norway). There is, however, a prior *Mya norvegica*, Gmelin, Syst. Nat., p. 3222, 1791, which appears in the List as *Lyonsia norvegica*, Chemnitz. Gmelin's name depends upon Chemnitz's account given in the Conch. Cab., vol. x, p. 345, pl. 170, figs. 1647-8, and is used as Chemnitz was a non-binomial writer. The next name given to the *Panomya* appears to be *Glycymeris arctica*, Lamarek (Anim. s. Vert., vol. v, p. 458, 1819: White Sea). Dall (Trans. Wagn. Free Inst. Sci. Philad., vol. iii, p. 832, 1898) has shown the necessity of using *Panomya* generically, but he overlooked the invalidity of the specific name, calling the shell *Panomya norvegica* (Spengler).

OTINA AURICULA (Turton).

When Turton (Conch. Dict. Brit. Isles, 1819, p. 70) described this species under the name *Helix otis*, from Devonshire, he added, "We have been informed that it was known to the late Mr. Montagu, who had intended to denominate it *H. Auricula*; but as this name approaches too near to *auricularia*, we have called it *Otis*."

In making this alteration Turton selected a name used over thirty years previously by Solander (Mus. Portl., 1786, p. 38) for a different shell. We can then fall back upon the alternative name published in the paragraph above noted. I have observed that Locard (Prod. Malac. France, 1886, p. 88) introduced *Otina turtoni* as a new name for *Otina otis* (Turton), "Nom à changer par suite de pléonasme." But in addition to the above, Brown had called the species *Galericulum oratum* (Illus. Conch. Gt. Brit., 1827, pl. xxxviii, figs. 27, 28), and there is a varietal name *candida*, Jeffreys.

THRACIA VILLOSIUSCULA (Macgillivray).

In the List appears *Thracia fragilis*, Pennant, but reference to Pennant shows that he only included *Tellina fragilis* (Brit. Zool., 2nd 8vo ed., vol. iv, p. 86, 1777) as of Linné. But he misidentified Linné's *Tellina fragilis* (Syst. Nat., 10th ed., p. 674, 1758), which is included in the British List as *Gastrana fragilis*. Consequently Pennant's specific name has no validity, and we must fall back upon *Anatina villosiuscula*, Macgillivray (Edin. New Phil. Journ., vol. ii, p. 370, pl. i, figs. 10, 11, March, 1827: I. of Harris).

LUTRARIA MAGNA (Costa).

Costa proposed a *Chama magna* (British Conch., 1778, p. 230, pl. xvii, fig. 4), and his name has been commonly rejected in favour of the later *Mya oblonga*, Gmelin, Syst. Nat., p. 3221, 1791 (based solely on Chemnitz, Conch. Cab., vol. vi, pl. ii, fig. 12, the latter writer being non-binomial), though the identity of the two has never been questioned.
